Conclusions: We describe the treatment algorithm of this challenging case and present a review of the literature on pseudoaneurysms presenting after carotid artery dissection to better delineate suggested management and endovascular options.

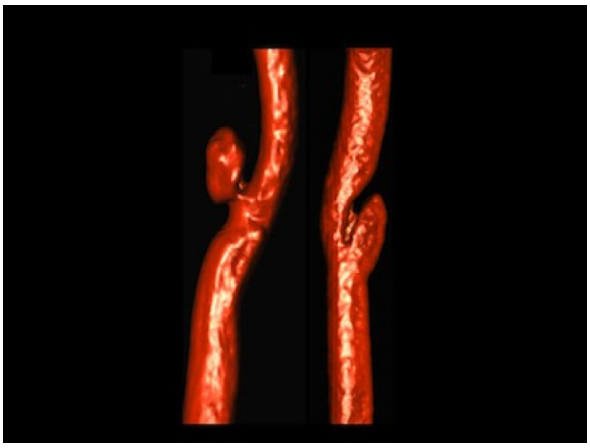

Fig.

Compliance With Long-Term Surveillance Recommendations Following Endovascular Aneurysm Repair or Type B Aortic Dissection

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Objective: Lifelong surveillance is recommended for endovascular aneurysm repair (EVAR) and acute, uncomplicated type B thoracic aortic dissection, although compliance remains a significant challenge. We sought to determine factors associated with failure to obtain recommended surveillance.

Methods: Patients surviving to discharge, who received EVAR for thoracic or abdominal aortic aneurysms or medical management for type B dissections, from 2004 to 2011 were reviewed. Primary end points were compliance with follow-up and need for reintervention. Comorbidities included coronary artery disease, congestive heart failure, hypertension, chronic obstructive pulmonary disease, diabetes, and chronic kidney disease. Socioeconomic factors examined were age, sex, distance from hospital, discharge destination (ie, home, with or without home health or family assistance, or skilled nursing facility), and insurance type. Complications included endoleak, sac expansion, endograft migration, infection, thrombosis, and aneurysm degeneration.

Results: We identified 157 patients (median age, 72.5 years); of these, 127 had EVAR and 30 had type B dissection. Median follow-up was 34 months. Overall, 48% were lost to follow-up, whereas 9% never returned for surveillance after their initial hospitalization. Follow-up was compared for each of the comorbidities and socioeconomic factors; none were found to significantly affect follow-up. The known complication rate was 31% (n = 49), with reintervention performed in 21% of EVAR patients and crossover to intervention in 33% with dissection. All-cause mortality was 20% as determined by the Social Security Death Index.

Conclusions: Despite a significant rate of reintervention in patients with EVAR and type B dissection, long-term compliance with surveillance is limited. In addition, predicting who is at risk of being lost to follow-up remains difficult. Coordinated protocols to capture EVAR and type B dissection patients for surveillance studies are needed to ensure optimal follow-up for these patients.

Creation of a Cross-Pubic Venous Bypass in a 7-Year-Old for Venous Claudication

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Objective: Ameliorating venous hypertension in pediatric patients is complicated by a variety of factors. Non-autogenous material is usually not favored because these materials do not allow for subsequent patient growth. Unfortunately, the vessels of pediatric patients are small and prone to spasm, potentially leading to decreased patency. Here we demonstrate techniques used to combat these issues in a 7-year-old boy with severe venous claudication.

Methods: A 7-year-old boy was referred to our Vascular Anomalies Center due to worsening symptoms of venous claudication. Imaging suggested congenital absence of the right external iliac venous system. The patient was initially treated with aggressive compression therapy. Despite excellent compliance, he continued to have severe pain that prevented him from participating in daily school activities, notably physical education class. Because of these continued symptoms, autogenous venous reconstruction was offered in the form of cross-pubic venous bypass. Noninvasive vascular laboratory studies before the operative intervention demonstrated a 3-mm competent great saphenous vein in the left leg. Prior experience with small veins in young patients prompted the use of a number of techniques to prevent vasospasm and maintain patency of the bypass. These techniques include soaking the vein with dilating agents, maintaining heparinized saline instillation within the vein throughout the course of the operation, and placement of an arteriovenous fistula.

Results: At the 3-month follow-up the patient's bypass graft remained patent, and he was symptom free. The patient has since returned to school and is participating in usual activities, including physical education class.

Conclusions: Cross-pubic venous bypass can be performed in pediatric patients even with a small great saphenous vein. A number of adjunctive techniques may be beneficial in improving patency of the bypass.

Current Trends in Abdominal Aortic Aneurysms and the Impact of Trainees

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Objective: The purpose of our study was to describe recent trends in abdominal aortic aneurysm repair, outcomes, and resident experience using a large population database.

Methods: We queried the American College of Surgeons National Surgical Quality Improvement Program database (2005 to 2010) for all open or endovascular repairs of abdominal aortic aneurysm (EVAR). We analyzed current trends, 30-day outcomes, and the effect of trainees on these outcomes.

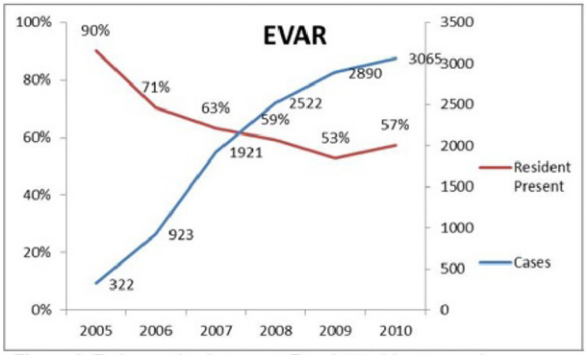

Figure 1. Endovascular Aneurysm Repair trend by year and percentage of resident participation.

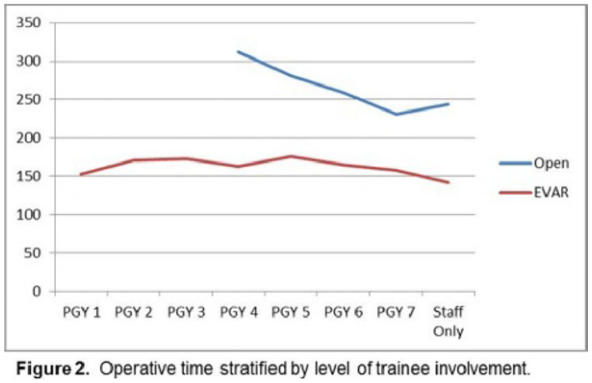

Figure 2. Operative time stratified by level of trainee involvement.

Results: We found 13,681 patients (81.5% men; mean age, 73.6 years) who met our inclusion criteria. A total of 1368 repairs were open, 1580 (11.5%) were for rupture, and 482 ruptures (31.1%) were repaired using an endovascular approach. Trainees were present for 60.7% of cases and were much more likely